

Release 02/2023

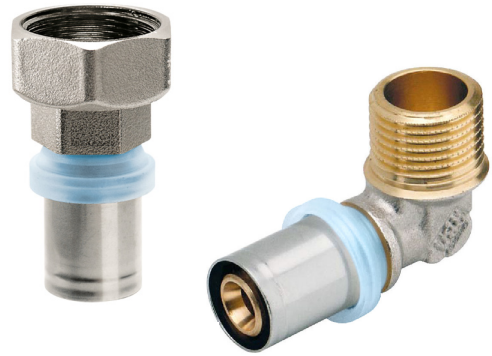
## **PRESS FITTINGS FOR MULTILAYER PIPES**

# PRESS FITTINGS FOR MULTILAYER PIPES

**+** Multilayer pipe connection made easier


Quick installation

Transparent cap shows correct insertion of the pipe into the fitting




## PRODUCTION RANGE

### FITTING WITH ROTATING NUT, GAS THREAD - FLAT GASKET


Product	Code	Size A	Size B
	812.14.10	14X2	3/8" F
	812.16.10	16X2	3/8" F
	812.14.20	14X2	1/2" F
	812.16.20	16X2	1/2" F
	812.20.20	20X2	1/2" F
	812.16.30	16X2	3/4" F
	812.18.30	18X2	3/4" F
	812.20.30	20X2	3/4" F
	812.26.30	26X3	3/4" F
	812.26.40	26X3	1" F
	812.32.40	32X3	1" F
	812.32.50	32X3	1 1/4" F

### FITTING WITH ROTATING NUT, GAS THREAD - EUROCONUS GASKET\*

Product	Code	Size A	Size B
	963.16.30	16X2	3/4" F *
	963.18.30	18X2	3/4" F *
	963.20.30	20X2	3/4" F *
	963.26.30	26X3	3/4" F *


\* G 3/4" Euroconus thread - UNI-EN-ISO 228

### FITTING WITH ROTATING NUT, RBM STANDARD THREAD

Product	Code	Size A	Size B
 <p>A diagram of a fitting with a rotating nut. It consists of a hexagonal nut (labeled B) with a blue O-ring, and a cylindrical body (labeled A) with a brass-colored end.</p>	826.14.00	14X2	RBM *
	826.16.00	16X2	RBM *
	826.18.00	18X2	RBM *
	826.20.00	20X2	RBM *


\* RBM standard thread W 24,5x19F

### FITTING WITH ROTATING NUT, W28X19F GASKET

Product	Code	Size A	Size B
 <p>A diagram of a fitting with a rotating nut and a gasket. It consists of a hexagonal nut (labeled B) with a blue O-ring, and a cylindrical body (labeled A) with a brass-colored end.</p>	962.14.00	14X2	W28x19F *
	962.16.00	16X2	W28x19F *
	962.18.00	18X2	W28x19F *
	962.20.00	20X2	W28x19F *
	962.26.00	26X3	W28x19F *

\* Withworth W28x19F thread

### STRAIGHT INTERMEDIATE FITTING

Product	Code	Size A	Size B
 <p>A diagram of a straight intermediate fitting. It consists of a cylindrical body (labeled A) with a brass-colored end and a blue O-ring.</p>	671.14.00	14X2	-
	671.16.00	16X2	-
	671.18.00	18X2	-
	671.20.00	20X2	-
	671.26.00	26X3	-
	671.32.00	32X3	-
	671.40.00	40X3,5	-
	671.50.00	50X4	-
	671.63.00	63X4,5	-

### STRAIGHT FITTING, FEMALE GAS CONNECTION



Product	Code	Size A	Size B
	672.14.20	14X2	1/2" F
	672.16.20	16X2	1/2" F
	672.18.20	18X2	1/2" F
	672.20.20	20X2	1/2" F
	672.18.30	18X2	3/4" F
	672.20.30	20X2	3/4" F
	672.26.30	26X3	3/4" F
	672.26.40	26X3	1" F
	672.32.40	32X3	1" F
	672.40.40	40X3,5	1" F
	672.40.50	40X3,5	1" 1/4 F
	672.50.60	50X4	1" 1/2 F
	672.63.70	63X4,5	2" F

### STRAIGHT FITTING, MALE GAS CONNECTION



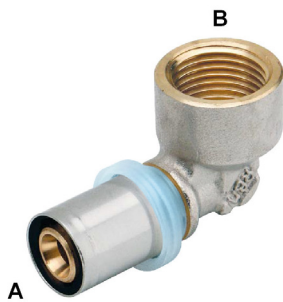
Product	Code	Size A	Size B
	673.14.10	14X2	3/8" M
	673.16.10	16X2	3/8" M
	673.14.20	14X2	1/2" M
	673.16.20	16X2	1/2" M
	673.18.20	18X2	1/2" M
	673.20.20	20X2	1/2" M
	673.18.30	18X2	3/4" M
	673.20.30	20X2	3/4" M
	673.26.30	26X3	3/4" M
	673.26.40	26X3	1" M
	673.32.40	32X3	1" M
	673.40.50	40X3,5	1" 1/4 M
	673.50.60	50X4	1" 1/2 M
	673.63.70	63X4,5	2" M

### INTERMEDIATE ELBOW FITTING



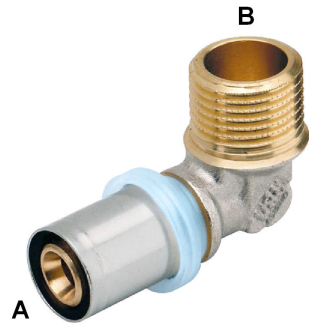
Product	Code	Size A	Size B
	674.14.00	14X2	-
	674.16.00	16X2	-
	674.18.00	18X2	-
	674.20.00	20X2	-
	674.26.00	26X3	-
	674.32.00	32X3	-
	674.40.00	40X3,5	-
	674.50.00	50X4	-
	674.63.00	63X4,5	-

### ELBOW FITTING, GAS FEMALE CONNECTION



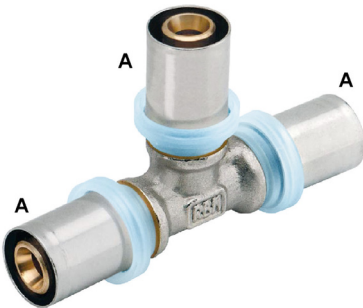
Product	Code	Size A	Size B
	675.14.20	14X2	1/2" F
	675.16.20	16X2	1/2" F
	675.18.20	18X2	1/2" F
	675.20.20	20X2	1/2" F
	675.18.30	18X2	3/4" F
	675.20.30	20X2	3/4" F
	675.26.30	26X3	3/4" F
	675.32.40	32X3	1" F
	675.40.50	40X3,5	1" 1/4 F
	675.50.60	50X4	1" 1/2 F

## ELBOW FITTING, GAS MALE CONNECTION



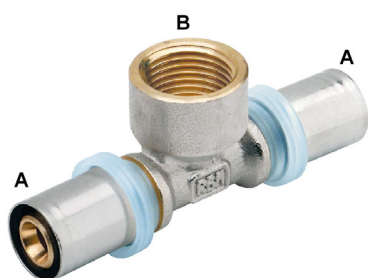
Product	Code	Size A	Size B
	676.14.20	14X2	1/2" M
	676.16.20	16X2	1/2" M
	676.18.20	18X2	1/2" M
	676.20.20	20X2	1/2" M
	676.18.30	18X2	3/4" M
	676.20.30	20X2	3/4" M
	676.26.30	26X3	3/4" M
	676.32.40	32X3	1" M
	676.40.50	40X3,5	1" 1/4 M

## INTERMEDIATE "T" FITTING



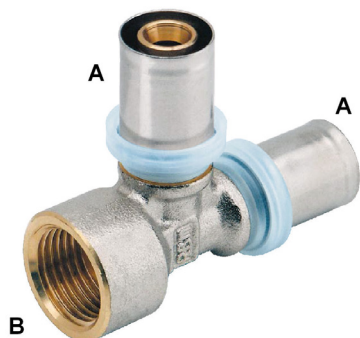
Product	Code	Size A	Size B
	677.14.00	14X2	-
	677.16.00	16X2	-
	677.18.00	18X2	-
	677.20.00	20X2	-
	677.26.00	26X3	-
	677.32.00	32X3	-
	677.40.00	40X3,5	-
	677.50.00	50X4	-
	677.63.00	63X4,5	-

### "T" FITTING, CENTRAL GAS FEMALE CONNECTION



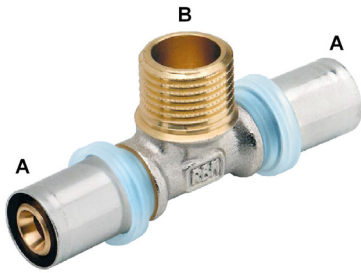
Product	Code	Size A	Size B
	678.14.20	14X2	1/2" F
	678.16.20	16X2	1/2" F
	678.18.20	18X2	1/2" F
	678.20.20	20X2	1/2" F
	678.18.30	18X2	3/4" F
	678.20.30	20X2	3/4" F
	678.26.30	26X3	3/4" F
	678.32.30	32X3	3/4" F
	678.32.40	32X3	1" F
	678.40.40	40X3,5	1" F
	678.50.40	50X4	1" F
	678.40.50	40X3,5	1" 1/4 F

### "T" FITTING, LATERAL GAS FEMALE CONNECTION



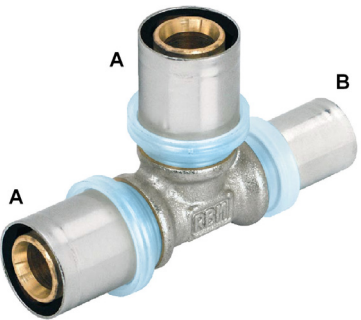
Product	Code	Size A	Size B
	679.14.20	14X2	1/2" F
	679.16.20	16X2	1/2" F
	679.18.20	18X2	1/2" F
	679.20.20	20X2	1/2" F
	679.18.30	18X2	3/4" F
	679.20.30	20X2	3/4" F
	679.26.30	26X3	3/4" F
	679.32.40	32X3	1" F

### "T" FITTING, CENTRAL GAS MALE CONNECTION



Product	Code	Size A	Size B
	680.14.20	14X2	1/2" M
	680.16.20	16X2	1/2" M
	680.18.20	18X2	1/2" M
	680.20.20	20X2	1/2" M
	680.18.30	18X2	3/4" M
	680.20.30	20X2	3/4" M
	680.26.30	26X3	3/4" M
	680.32.30	32X3	3/4" M
	680.26.40	26X3	1" M
	680.32.40	32X3	1" M
	680.40.40	40X3,5	1" M
	680.40.50	40X3,5	1" 1/4 M

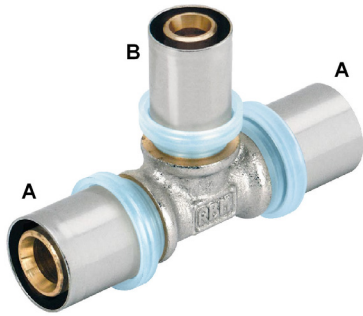
### INTERMEDIATE "T" FITTING WITH REDUCED LATERAL WAY



Product	Code	Size A	Size B
	851.16.00	16X2	14X2
	851.20.10	20X2	16X2
	851.26.10	26X3	16X2
	851.26.20	26X3	20X2
	851.32.10	32X3	16X2
	851.32.00	32X3	20X2
	851.32.20	32X3	26X3



### INTERMEDIATE "T" FITTING WITH REDUCED CENTRAL AND LATERAL WAY



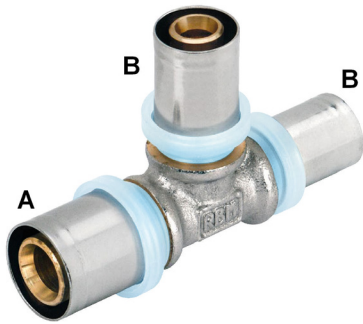
Product	Code	Size A	Size B
	851.14.10	16X2	14X2
	851.16.40	18X2	16X2
	851.16.10	20X2	16X2
	851.18.10	20X2	18X2
	851.16.90	26X3	16X2
	851.20.70	26X3	20X2
	851.20.90	32X3	20X2
	851.26.40	32X3	26X3

### INTERMEDIATE STRAIGHT FITTING WITH REDUCED WAY



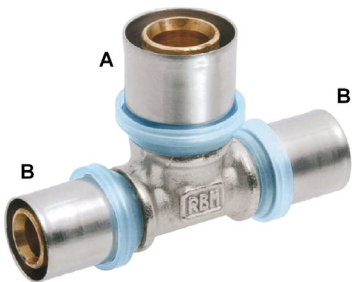
Product	Code	Size A	Size B
	890.16.00	16X2	14X2
	890.18.00	18X2	14X2
	890.18.10	18X2	16X2
	890.20.10	20X2	16X2
	890.20.20	20X2	18X2
	890.26.00	26X3	16X2
	890.26.10	26X3	18X2
	890.26.20	26X3	20X2
	890.32.00	32X3	16X2
	890.32.10	32X3	20X2
	890.32.20	32X3	26X3
	890.40.10	40X3,5	32X3
	890.50.10	50X4	32X3
	890.50.00	50X4	40X3,5
	890.63.10	63X4,5	40X3,5
	890.63.00	63X4,5	50X4

### INTERMEDIATE "T" FITTING WITH REDUCED CENTRAL WAY



Product	Code	Size A	Size B
	851.14.00	16X2	14X2
	851.14.20	18X2	14X2
	851.14.50	20X2	14X2
	851.16.20	18X2	16X2
	851.16.30	20X2	16X2
	851.18.00	20X2	18X2
	851.16.60	26X3	16X2
	851.18.20	26X3	18X2
	851.20.20	26X3	20X2
	933.16.00	32X3	16X2
	851.18.30	32X3	18X2
	851.20.40	32X3	20X2
	851.26.00	32X3	26X3
	851.40.10	40X3,5	26X3
	851.40.00	40X3,5	32X3
	851.50.20	50X4	26X3
	851.50.00	50X4	40X3,5
	851.63.40	63X4,5	26X3
	851.63.20	63X4,5	40X3,5

### INTERMEDIATE "T" FITTING WITH DOUBLE REDUCED LATERAL WAY

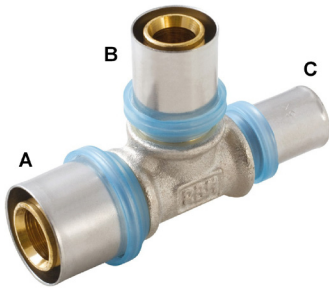


Product	Code	Size A	Size B
	851.18.40	18X2	16X2
	851.20.00	20X2	16X2
	851.26.50	26X3	20X2
	851.32.30	32X3	26X3

**INTERMEDIATE "T" FITTING WITH TRIPLE REDUCTION**

Product	Code	Size A	Size B	Size C
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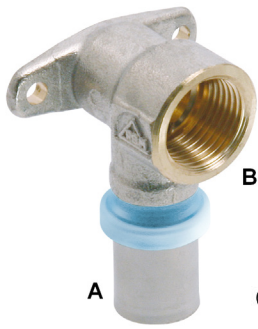
	999.20.00	26X3	20X2	16X2
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**FLANGED ELBOW FITTING, STANDARD LENGTH, FEMALE GAS CONNECTION**

Product	Code	Size A	Size B
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	853.04.00	16X2	1/2" F
	853.04.20	18X2	1/2" F
	853.04.10	20X2	1/2" F
	853.05.00	26X3	3/4" F

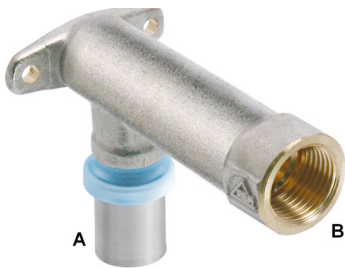


Detail only for the code 853.05.00

**FLANGED ELBOW FITTING, STANDARD LENGTH, FEMALE GAS CONNECTION – XL 77 MM**

Product	Code	Size A	Size B
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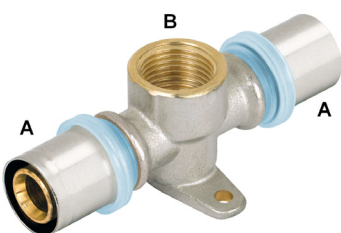
	853.04.90	16X2	1/2" F
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**FLANGED, NON-ALIGNED FITTING, FEMALE GAS CONNECTION**

Product	Code	Size A	Size B
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	852.04.00	16X2	1/2" F
	852.04.30	20X2	1/2" F



## BRACKETS WITH PRESS FITTINGS FEMALE GAS CONNECTION

Product	Code	Size A	Size B
	1253.04.00	16X2	80*
	1253.04.20	16X2	150*
	1253.04.10	16X2	160*
	1253.04.60	20X2	150*
	1253.04.50	20X2	160*

\* centre distance mm

### DESCRIPTION

The use of press fittings simplifies significantly the connection of multilayer pipes.

The connection is quick and clean due to the total absence of sealing materials, pastes and lubricating liquids.

Mechanical tightness is obtained by changing the shape of the bush made of brass or of stainless steel by means of a pressing tool. The pulling out pressure is significantly higher than the operating pressure of the multilayer pipe.

The insulating cap is transparent and makes it possible to check whether the pipe has been inserted correctly into the fitting.

**N.B. Correct connection is guaranteed when the pipe is inserted all the way to the insulating cap stop.**

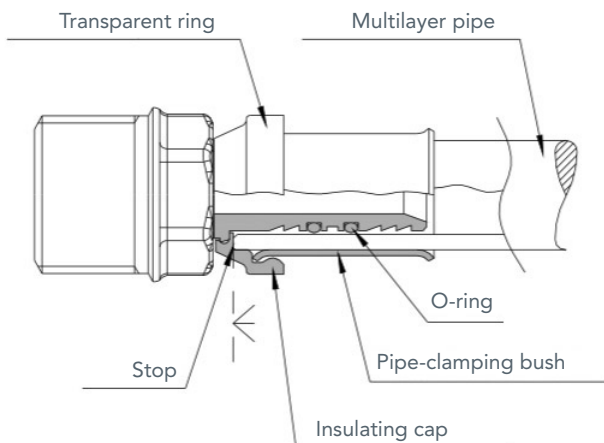
### USE

**RBM press fittings** make it possible to connect the RBM Tita-fix multilayer polyethylene pipe

**RBM press fittings** are used to create hot/cold water distribution systems for sanitary and heating purposes.

### PRODUCTION RANGE

Press fittings are produced in a wide range of sizes and shapes in order to meet all possible requirements (see chapter "production range" in this technical data sheet).



**Figure 1**  
Press fitting make-up chart




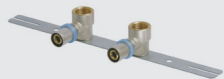

## CONSTRUCTION CHARACTERISTICS

Body	Brass with nickel-plated surface CW 617N UNI EN 12165
Seals	EPDM PEROX
Pipe-clamping bush	Stainless steel
Dielectric pipe fastening cap	PE









## TECHNICAL CHARACTERISTICS

Maximum temperature	+ 95 °C
Maximum operating pressure	10 bar (1000 kPa)

## ACCESSORIES

	Code	Description
	1542.XX.X0 1545.XX.X0	<b>RBM Tita-fix multilayer pipe in coils and bars.</b> Available in the following versions: PE-Xc/Al/PE-RT and PE-RT/Al/PE-RT
	934.00.00	<b>Fixing plate for flanged fittings of galvanized steel.</b>
	934.00.50	<b>Fixing and positioning bracket of galvanized steel.</b>
	1253.04.X0	<b>Brackets with press fittings.</b>
	20.04.10 20.05.10 20.05.20	<b>Recessed stop cock with chromium plated cap and press fittings for multilayer pipes.</b> Maximum temperature: 95°C. Maximum pressure: 10 bar. Brass body, chromium plated cap and control handle, NBR/EPDM PEROX seals and press connections (for Ø16 and Ø26 mm pipes, thickness from 2 to 3 mm), with PE dielectric cap and stainless steel pipe clamping bush.

## EQUIPMENT AND TOOLS FOR PREPARING THE PIPE BEFORE INSERTING IT INTO THE FITTING

	Code	Description
Cut	 553.00.X2 2179.00.02	<b>Portable manual cutter (code 553.00.42, 553.00.52), suitable for pipes (Ø6 ÷ Ø42 mm) of PE, PB, PP, PVC, PVDF.</b> Cutter code 553.00.42 for multilayer pipes up to Ø35 mm. Cutter code 553.00.52 for multilayer pipes up to Ø42 mm. Cutter code 2179.00.02 for multilayer pipes up to Ø26 mm
	 553.00.X2	<b>Portable manual pipe cutter (code 553.00.62, 553.00.72), suitable for PVC and copper pipes (Ø6 ÷ Ø42 mm).</b> Cutter code 553.00.62 for multilayer pipes up to Ø35 mm. Cutter code 553.00.72 for multilayer pipes up to Ø42 mm.
Calibrating/flaring	 2006.14...63.00	<b>Calibrating/flaring tool</b> for removing internal burrs and calibrating the internal diameter in the cutting area of the multilayer pipe (Ø14 ÷ Ø63 mm) at the same time. These tools are designed for manual use and for use with a drill/screwdriver.
	 2008.00.02	<b>Complete kit of calibrating/flaring tools</b> This case contains 4 calibrating/flaring tools in the following sizes: Ø 16 - 20 - 26 - 32. It is equipped with a suitable handle for using the tools manually.
	 2007.00.02	<b>Handle for calibrating/flaring tools</b> This handle is used for the manual preparation of RBM Tita-fix multilayer pipes.
	 1165.00.02	<b>Wireless portable drill/screwdriver</b> for preparing the RBM Tita-fix multilayer pipe for the fitting. This kit is made up of the following: <ul style="list-style-type: none"> <li>• 1 wireless drill;</li> <li>• 2 14,4V 1,5 Ah batteries;</li> <li>• 1 battery charger for the drill/screwdriver;</li> <li>• 1 case containing the drill/screwdriver kit.</li> </ul>
Bending	 553.00.32	<b>Portable pipe bending kit for multilayer pipe</b> The kit includes the following: <ul style="list-style-type: none"> <li>• hydraulic manual pump;</li> <li>• shock-proof containment and transportation case;</li> <li>• pipe bending aluminium templates, suitable for the following diameters: Ø 14 - 16 - 18 - 20 - 26 - 32;</li> <li>• Quick connection aluminium counter-templates</li> </ul>
	 1875.XX.02	<b>Manual pipe bender spring for multilayer pipe</b> suitable for the following diameters: Ø 14 - 16 - 18 - 20 - 26

## EQUIPMENT AND TOOLS FOR PRESSING THE PIPE INTO THE FITTING

	Code	Description
Pressing		<b>553.00.12</b> <b>Portable electrical press for press fittings</b> (230Vac power supply) The kit includes a battery-charger and a shock-proof containment and transportation case.
		<b>553.00.02</b> <b>Portable wireless press for press fittings</b> (battery 18V) The kit includes a battery-charger and a shock-proof containment and transportation case.
		<b>681.14...63.02</b> <b>TH series pliers for press fittings</b> for pipes with diameters from Ø14 to Ø63 mm. suitable for the RBM press code 553.00.X2.
		<b>1338.00.02</b> <b>Portable electrical press for press fittings</b> (battery 14,4V). The kit includes a battery-charger and a shock-proof containment and transportation case.
		<b>1339.00.02</b> <b>Pliers for multilayer pipes</b> suitable for RBM press code 1338.00.02.
		<b>1340.XX.02</b> <b>TH series interchangeable insert</b> suitable for RBM press code 1339.00.02 Sizes: Ø 14 - 16 - 18 - 20 - 26 - 32

## PRESS-FITTINGS FOR MULTILAYER PIPES CAN BE MOUNTED CORRECTLY BY PERFORMING 4 SIMPLE OPERATIONS

### STEP 1

Cut the pipe using a suitable cutter which makes a clean cut possibly without burrs.

Recommended cutters: RBM code **553.00.42 - 553.00.52 - 2179.00.0**



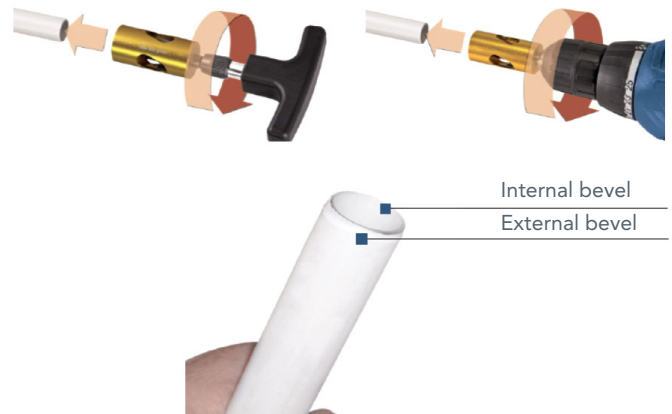
### STEP 2

Insert the calibrating/flaring tool into the pipe.

Rotate it clockwise, until the pipe is calibrated and flared. This operation can be carried out manually (figure above on the left) or using a drill/screwdriver (figure above on the right).

Recommended calibrating/flaring tool: complete case code **2008.00.02**

**N.B.: The internal bevel of the pipe prevents the fitting from cutting the O-Ring during insertion into the fitting**



### STEP 3

Insert the pipe into the fitting all the way until it stops.

This operation can be checked by looking through the transparent ring, as shown on the picture on the side of this page.

The insertion is easier if the pipe has been lubricated inside with water or with suitable silicone oil.

For sanitary systems please be sure that the silicone oil is suitable for drinkable liquids.

**THE USE OF DIFFERENT LUBRICANTS WILL DAMAGE THE SEALS.**

For the calibration/flaring of pipelines bigger than  $\varnothing 32$ , please use the screwdriver drill code **1165.00.02**

Correct insertion of the pipe can be seen through the transparent ring



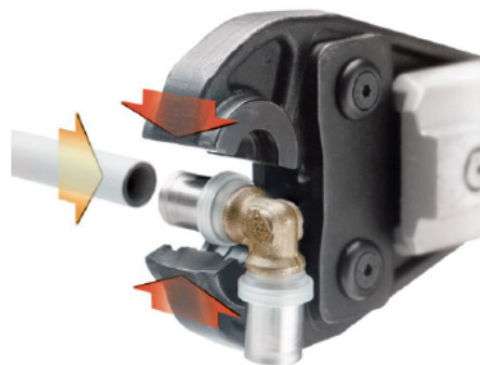
### STEP 4

Apply the pliers in the correct position and press.

Recommended presses: RBM code 553.00.12 - 553.00.02. Recommended pliers: TH series, RBM code 681.14.02 - 681.16.02 - 681.18.02 - 681.20.02 - 681.26.02 - 681.32.02 - 681.40.02 - 681.50.02 - 681.63.02

**RBM press fittings are compatible with various profiles of pliers and, in particular, with the following:**

TH-H-U-B	diameter 14x2
TH-H-U-B-F	diameter 16x2 - 18x2 - 20x2
TH-H-B	diameter 26x3
TH-H	diameter 32x3
TH	diameter 40x3,5 - 50x4 - 63x4,5





## PREPARATION OF THE PIPE FOR INSERTION INTO THE CHOSEN FITTING



Before installing any type of fitting onto the RBM Tita-fix multilayer pipe, it is absolutely essential to prepare the multilayer pipe according to the fitting to be used. The preparation of the multilayer pipe is mandatory to avoid malfunctioning of the "pipe/fitting" system during use.

**RBM Spa cannot be held responsible for damage resulting from mistakes during the putting into operation or during maintenance work, from the non-observance of these instructions and from improper use of the system. It is forbidden to use multilayer pipes for purposes differing from the purposes specified in this manual.**

*RBM spa reserves the right to improve and change the described products and related technical data at any moment and without prior notice: always refer to the instructions attached with the supplied components; this sheet is an aid, should the instructions be extremely schematic. Our technical department is always at your disposal for any doubt, problem or clarification.*

